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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PHAN, THANH S

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/086,644		SCHROCK ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	THANH S. PHAN		2833	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/30/05.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

In view of Appellant's Briefs, various comments from the Board of Appeals and an omission found in the prosecution, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/renee s luebke/  
Renee Luebke  
SPE – AU 2833

### ***Claim Objections***

Claims 5 and 23-26 are objected to because of the following informalities:

Claim 5 recites "the input device" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 23-26 are drawn to "The method" but depend on claim 1, an apparatus claim. For this Office action, the examiner has considered claims 23-26 as depending on claim 13, since claim 13 is a method claim preceding claims 23-26.

Appropriate corrections are required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7, 8, 10-14, 16, 17, 21, 23, 26-29, 31, 32, 36 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Knepper [US 6,212,469].

Regarding claim 1, Knepper discloses a device for calculating a pace, comprising: a chronograph [column 4, lines 14-26] for measuring an elapsed time; a distance memory containing a distance [column 4, lines 22-25]; and a pace calculation process which calculates a pace by dividing the distance contained in the distance memory by the elapsed time provided by the chronograph [column 4, lines 18-20].

Regarding claim 2, Knepper discloses a display which displays the calculated pace [column 4, lines 37-38].

Regarding claim 3, Knepper further comprises a chronometer [column 4, line 16].

Regarding claim 4, Knepper further comprises an input device that allows a user to input the distance into the distance memory [column 2, lines 55-57].

Regarding claim 5, Knepper discloses the input device including at least one depressable button [50, 52, 53].

Regarding claim 7, Knepper discloses the chronograph is implemented using a mechanical structure (the buttons).

Regarding claim 8, Knepper further includes an optical encoder [not explicitly numbered, figure 2 shows a digital format display and column 4, lines 15-16 states the outputting of the elapsed time to the display] for converting an elapsed time measured by the chronograph into a digital format.

Regarding claim 10, Knepper discloses the chronograph, the distance memory, and the pace calculation process are incorporated into a watch [column 3, lines 47-52].

Regarding claim 11, Knepper discloses the watch is a wristwatch [column 3, lines 47-52 and figures 1& 2].

Regarding claim 12, Knepper further includes a data memory for storing the calculated pace [the processor stores information for calculations; column 4, lines 14-31].

Regarding claim 13, Knepper discloses a method of calculating a pace with a pace calculation device [figure 3] comprising: receiving a distance into a distance memory of a pace calculation device [step 120]; measuring an elapsed time with a chronograph [step 140]; and dividing the distance contained in the distance memory by the elapsed time provided by the chronograph to calculate a pace [step 190].

Regarding claim 14, Knepper further comprises displaying the calculated pace to a user of the pace calculation device [column 4, lines 14-16].

Regarding claim 16, Knepper discloses receiving the distance into the distance memory includes: receiving input selecting a numerical value; and receiving input selecting a distance unit from among a plurality of distance units [column 2, lines 55-57].

Regarding claim 17, Knepper discloses the plurality of distance units include two or more selected from the group consisting of kilometers, miles, yards, meters, feet, and nautical miles [column 2, line 56].

Regarding claim 21, Knepper discloses the distance is received into the distance memory from an input device having at least one depressable button [column 2, lines 55-59].

Regarding claim 23, Knepper further comprises receiving the distance into the distance memory [step 120] before prompting the pace calculator device to measure the elapsed time.

Regarding claim 26, Knepper further comprises saving the calculated pace into a data memory [column 1, line 59-63, the calculated pace must be stored/saved in the processor for later calculation such as determining the time to finish].

Regarding claim 27, Knepper discloses a method of calculating a pace [figure 3], comprising: inputting a distance into a distance memory of a pace calculation device [step 120]; prompting the pace calculation device to measure an elapsed time (starting with step 130; column 3, lines 1-3); and prompting the pace calculation device to calculate a pace by dividing the distance by the elapsed time [step 190].

Regarding claim 28, Knepper discloses inputting the distance into the distance memory prompts the pace calculation device to calculate the pace [figure 3].

Regarding claim 29, Knepper further comprises prompting the pace calculation device to display the calculated pace [column 4, lines 14-16].

Regarding claim 31, Knepper discloses inputting the distance into the distance memory includes: selecting a numerical value; and selecting a distance unit from among a plurality of distance units [column 2, lines 55-57].

Regarding claim 32, Knepper discloses the plurality of distance units include two or more selected from the group consisting of kilometers, miles, yards, meters, feet, and nautical miles [column 2, line 56].

Regarding claim 36, Knepper discloses the distance is received into the distance memory from an input device having at least one depressible button [column 2, lines 55-59].

Regarding claim 38, Knepper further comprises receiving the distance into the distance memory [step 120] before prompting the pace calculator device to measure the elapsed time.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 22 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knepper in view of Pennington [US 6,414,907].

Regarding claims 6, 22 and 37, Knepper discloses an input device [actuator element 18] having depressable buttons for inputting operation initialization, wherein one of the depressable buttons [53] is for incrementing and clear/decrementing a selected value [column 2, lines 47-63]. Knepper does not explicitly teach a first depressable button for selecting a data field, a second depressable button for incrementing a value in a selected data field, and a third depressable button for decrementing the value in the selected data field. Pennington discloses a timepiece comprising a set switch/button 20 to select a displayed data region, then incrementing or decrementing the data by pressing switch/button 22 or switch/button 23 respectively. Because both Knepper and Pennington teach timepiece devices with depressable buttons for selecting operation parameters and/or values, it would have been obvious to one skilled in the art to incorporate the functions/buttons design as taught by Pennington within the device of Knepper to provide significant simplification in the selection and execution of the timepiece.

Claims 9, 15 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knepper in view of Fishman [US 5,771,399].

Regarding claims 9, 15 and 30, Knepper discloses the claimed invention but does not explicitly teach a device wherein the chronograph, the distance memory, and the pace calculation process are incorporated into a personal digital assistant, and further prompting and providing the calculated pace to another device. Fishman teaches a



Art Unit: 2833

wristwatch 104 comprising a receiver and transmitter 240 for transferring data and information to an external device 102, wherein the external device is a computer or personal digital assistant [column 7, lines 5-28]. It would have been obvious to a person skilled in the art at the time of the invention to adapt Knepper to include means to incorporate the pace calculation system in a personal digital assistant, as well as means to provide the calculated pace to another device for the purpose of providing the on-the-move user pace calculations when needed without carrying excessive devices.

Claims 24, 25, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knepper.

Regarding claims 24, 25, 39 and 40, Knepper teaches a device and method of obtaining a pace/rate that can be calculated by dividing the distance traveled by the elapsed time. Knepper does not explicitly teach the order of obtaining the traveled distance with respect to the elapsed time. It would have been obvious to a person skilled in the art at the time the invention was made to receive the distance prior to, after or during the measuring of the elapsed time. In the instant case, as evident by applicant's claims, the timing of obtaining the distance traveled with respect to the elapsed time is insignificant as long as all of the values are obtained prior to the pace calculation process. Therefore, providing distance traveled before, after or while measuring the elapsed time is an obvious step in the art.

Claims 18-20, 33-35, 41-43, 45-47 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knepper in view of Thinesen [5,050,141].

Regarding claims 18-20, 33-35, 41 and 42, Knepper teaches a device and method comprising a pace calculation process, which calculates a pace by dividing a distance by the elapsed time provided by the chronograph [column 1, lines 59-60]. Knepper also teaches wherein the device is capable of measure and display various intervals of elapsed times [column 1, lines 53-58]. Knepper does not explicitly teach wherein the device comprising a lap/split times measurement. Thinesen teaches a LAP/SPLIT mode for acquiring numerous time and pace values. Because both Knepper and Thinesen teach devices/methods for pace calculation of various time intervals, it would have been obvious to one skilled in the art to substitute/incorporate one method for/with the other to achieve the predictable result of providing a measured pace of each split/lap interval over a longer period of time.

Regarding claim 43, Knepper and Thinesen disclose the claimed invention. Knepper further comprises displaying the calculated pace to a user of the pace calculation device [column 4, lines 14-16].

Regarding claim 45, Knepper and Thinesen disclose the claimed invention. Knepper further discloses receiving the distance into the distance memory includes: receiving input selecting a numerical value; and receiving input selecting a distance unit from among a plurality of distance units [column 2, lines 55-57].

Regarding claim 46, Knepper and Thinesen disclose the claimed invention. Knepper further discloses the plurality of distance units include two or more selected from the group consisting of kilometers, miles, yards, meters, feet, and nautical miles [column 2, line 56].

Regarding claim 47, Knepper and Thinesen disclose the claimed invention.

Knepper further discloses the distance is received into the distance memory from an input device having at least one depressable button [column 2, lines 55-59].

Regarding claims 49 and 50, Knepper, as modified, teaches a device and method of obtaining a pace/rate that can be calculated by dividing the distance traveled by the elapsed time/split times. Knepper, as modified, does not explicitly teach the timing of obtaining the traveled distance with respect to the elapsed time/split time. It would have been obvious to a person skilled in the art at the time of the invention was made receive the distance before or after the measuring of the elapsed time/split times. In the instance case, as evident by applicant's claims, the timing of obtaining the distance traveled with respect to the elapsed time is insignificant as long as the values are obtained prior to the pace calculation process. Therefore, providing distance traveled before or after measuring the elapsed time/split times is an obvious step in the art.

Regarding claim 51, Knepper further comprises saving the calculated pace into a data memory [column 1, line 59-63, the calculated pace must be stored/saved in the processor for later calculation such as determining the time to finish].

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knepper and Thinesen as applied to claim 41 above, and further in view of Fishman.

Regarding claim 44, Knepper and Thinesen disclose the claimed invention but does not explicitly teach prompting and providing the calculated pace to another device. Fishman teaches a wristwatch 104 comprising a receiver and transmitter 240 for

transferring data and information to an external device 102. It would have been obvious to a person skilled in the art at the time of the invention to adapt Knepper, as modified, to include means to provide the calculated pace to another device for the purpose of providing the on-the-move user pace calculations when needed without carrying excessive devices.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knepper and Thinesen as applied to claim 41 above, and further in view of Pennington.

Regarding claim 48, Knepper, as modified, discloses the pace calculation device comprises an input device [Knepper's actuator element 18] having depressable buttons for inputting operations initialization, wherein one of the depressable button [Knepper's button 53] is for incrementing and clear/decrementing a selected value [column 2, lines 47-63]. Knepper, as modified, does not explicitly teaches a first depressable button for selecting a data field, a second depressable button for incrementing a value in a selected data field, and a third depressable button for decrementing the value in the selected data field. Pennington discloses a timepiece comprising a set switch/button 20 to select a displayed data region, then incrementing or decrementing the data by pressing switch/button 22 or switch/button 23 respectively. Because both Knepper, as modified, and Pennington teach timepiece devices with depressable buttons for selecting operation parameters and/or values, it would have been obvious to one skilled in the art to incorporate the functions/buttons design as taught by Pennington with the device of Knepper, as modified, to provide significant simplification in the selection and execution of the timepiece.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THANH S. PHAN whose telephone number is (571)272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee Luebke can be reached on 571-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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